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The form and position of pronominal objects with non-nominal antecedents in Scandinavian and German

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ABSTRACT. The present paper discusses a possible correlation between the placement of pronominal objects with non-nominal antecedents in Norwegian, and the use of the pronouns *es* (it) and *das* (that) in German. For Norwegian object shift (OS), it has been shown that while pronominal objects with non-nominal antecedents generally do not shift, this is not the case when these elements take on the discourse function of *continuing topics*. In this paper, we show that a very similar pattern can be observed in German. However, this is not related to whether object pronouns scramble or not, but rather to which pronominal *form* is used to refer back to the clausal antecedent. In German, *das* is generally used to refer back to non-nominal antecedents, however, *es* is also sometimes an option. In this study, we find parallels between the use of OS and *es*, on the one hand, and lack of OS and *das*, on the other, and propose that the former is preferred when the proposition the proform refers back to is part of the common ground in the discourse. This ties in nicely with previous research on Norwegian OS, as in order for a proposition to constitute a continuing topic in the discourse, it has to be established as part of the interlocutors' common ground.

Keywords: Scrambling, object shift, proforms, clausal antecedents, common ground, German, Norwegian.

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(4) a. Ich werde **im Herbst umziehen**. Wird Vera **das/*es auch** machen? (Germ.)
I will in fall move will Vera that also do
 ‘I’m moving in the fall. Is Vera also doing that?’

b. *Wird Vera **auch das/es** machen?
will Vera also that do
 ‘Is Vera also doing that?’

In (3) and (4) the pronominal objects *det* (Norwegian) and *das* (German) refer to the whole VP ‘moving in the fall.’ Notably, as illustrated in (3), in Norwegian (as well as the other Mainland Scandinavian languages) the pronominal object *det* typically refrains from OS in such cases (cf. Andréasson 2009; 2010; Anderssen & Bentzen 2011; 2012; Josefsson 2011; 2012; Lødrup 2012; Bentzen et al. 2013a). In German, in contrast, the pronominal object still obligatorily scrambles, as illustrated by the ungrammaticality of (4b). However, in contrast to (2), the neuter pronominal object *das* is typically used rather than *es* in these contexts, as shown in (4a).

However, as discussed in among others Anderssen & Bentzen (2011), even pronominal objects with non-nominal antecedents may undergo OS in Norwegian under certain conditions. According to Anderssen & Bentzen (2011), one such context involves multiple mentions of *det* (it) with a non-nominal antecedent. This is illustrated in (5) below (from Anderssen & Bentzen 2011; these contexts are also discussed in Andréasson 2009):

(5) **John gikk til jobben.** (Norw.)
John walked to work.the
 Maria forventet **ikke det₁**. Susanne forventet **det₂ heller ikke**.
Maria expected not it Susanne expected it either not

‘John walked to work. Maria didn’t expect that. Susanne didn’t expect it either.’

In (5), both instances of *det* refer to the whole proposition ‘John walked to work.’ However, they typically occur in different *positions*. While the first instance of the pronominal anaphor remains unshifted, the second one is preferred in a shifted position. In parallel, in German the *type* of preferred pronominal object in the two instances varies. While *das* is preferred in the first instance, *es* is preferred in the second:

(6) Sie meint, **dass Johannes tüchtig ist.** (Germ.)
she thinks that Johannes clever is

Ich sehe **das₁ nicht** so, und Karen sieht **es₂ auch** nicht so.
I see that not so and Karen sees it also not so

‘She thinks that Johannes is clever, but I don’t think so, and Karen doesn’t think so either.’

This paper is a first exploration of the correlation between the distribution of Norwegian OS and German *es/das* in situations where these pronominal objects refer to non-nominal antecedents. We will argue that there are parallels between Norwegian and German in that contexts where these pronominal objects remain unshifted in Norwegian correspond to contexts where *das* is preferred over *es* in German, and contexts where Norwegian requires OS of such pronominal objects correspond to contexts where *es*

is preferred over *das* in German. Moreover, we will propose that the distribution of OS in Norwegian and *es/das* in German is related to information structure in the sense that OS in Norwegian and *es* in German are used when the proposition this pronoun refers to is given information and part of the common ground between the speaker and the hearer in the discourse. Typically, this proposition constitutes the established discourse topic in the conversation.

The paper is structured as follows. In section 2 we outline the patterns of OS in Norwegian and the other Mainland Scandinavian languages in more detail, specifically focussing on the recent findings concerning the behaviour of pronominal object *det* with non-nominal antecedents. In section 3, we present and discuss findings from our current investigation regarding the realization of pronominal objects with non-nominal antecedents in Norwegian and German. We discuss the parallels found between the patterns of realization of such pronouns in Norwegian and German, and we develop an analysis of the distribution of these pronouns which is an expansion of the proposal in Anderssen & Bentzen (2012). Section 4 contains some concluding remarks.

2. OS in Mainland Scandinavian and the relevance of different types of topics

As mentioned in the introduction, the traditional assumption regarding OS is that it applies to all weak/unstressed pronominal objects. An example of this was provided in (1a). Recently, however, as illustrated in (3), various studies have shown that OS of these elements is not always obligatory. First of all, Josefsson (2003), Andréasson (2008), and Bentzen et al. (2013a) all show that in Swedish, pronominal objects with nominal antecedents do not consistently undergo OS.¹ This is illustrated in (7) (from Bentzen et al. 2013a:137):

- (7) ja^a fast ja ser **inte** **dom** nu. (Swedish)
yes but I see not them now
 ‘Yes, but I can’t see them right now.’

At the same time, Andréasson (2008) and Bentzen et al. (2013a) confirm that OS is indeed obligatory in such contexts in Danish and Norwegian. More importantly for the present study, however, pronominal objects with *non-nominal* antecedents typically fail to undergo OS in all the Mainland Scandinavian languages (Andréasson 2008; 2009; 2010; Anderssen & Bentzen 2011; 2012; Josefsson 2011; 2012; and Lødrup 2012). While the pronominal object *det* ‘it’ typically refers back to a nominal antecedent in the neuter gender, it may also be used as an anaphor for a clause, a vP or a kind-denoting DP (of any gender). This is illustrated in (8), where the antecedent of *det* is a VP in (8a) and a full clause in (8b) (from Anderssen & Bentzen 2012:10).

- (8) a. A: Spiste du noe frukt? (Norwegian)
ate you any fruit_{MASC}
 ‘Did you eat any fruit?’
 B: Nei, jeg gjorde {***det**_{VP}} ikke {**det**_{VP}}.
no I did it_{NEUT} not it_{NEUT}
 ‘No, I didn’t.’ (*det* = ‘eat any fruit’)

¹ Their empirical base is grammaticality judgments, written text corpora and spoken language corpora, respectively.

- b. A: Har hun gått hjem?
has she gone home
 ‘Has she gone home?’
- B: Jeg tror {**det**_{CLAUSE}} ikke {**det**_{CLAUSE}}.
I think it_{NEUT} not it_{NEUT}
 ‘I don’t think so.’ (*det* = ‘that she has gone home’)

Many different accounts have been proposed for the general OS patterns throughout the years, e.g. related to case assignment (Holmberg 1986; Vikner 1994; Holmberg & Platzack 1995); defocussing (Holmberg 1999; Mikkelsen 2011); phases and order preservation (Fox & Pesetsky 2005), and prosody (Erteschik-Shir 2005; Josefsson 2003; 2010). We will not outline the various approaches here (see Vikner 2006 for an extensive overview, and Bentzen et al. 2013a for a recent discussion of how various current approaches fare against spontaneous spoken corpus data). Rather, we will take an approach that is inspired by various proposals that make reference to information structure. For example, some accounts of OS have suggested that it is a defocussing operation in which pronominal objects that are not focus elements undergo OS to escape the focus domain (i.e. the VP/vP) (cf. Holmberg 1999; Mikkelsen 2011). Anderssen & Bentzen (2012), however, argue that this is not a sufficient explanation. Although it is clear that objects undergoing OS are defocussed, they point out that not all defocussed pronominal objects undergo OS. More specifically, this is not the case with the type of pronominal objects studied in the current paper, namely those that have a non-nominal antecedent. Such objects are often (fairly) unstressed and do not constitute obvious focus (or contrastive) elements. Still, they fail to undergo OS in the Mainland Scandinavian languages. Moreover, Anderssen & Bentzen (2012) argue that these elements have certain topical properties. This is illustrated by the fact that pronominal objects with non-nominal antecedents often occur in the prototypical clause-initial topic position. Consider (9) below, which provides alternative B-answers to A’s questions in (8), with the pronominal objects in clause-initial position. According to Anderssen & Bentzen (2012), the replies of B in (8) and (9) are both perfectly natural responses to the questions posed by A:

- (9) a. A: Spiste du noe frukt? (Norwegian)
ate you any fruit_{MASC}
 ‘Did you eat any fruit?’
- b. B: Nei, {**det**_{VP}} gjorde jeg ikke.
no it_{NEUT} did I not
 ‘No, I didn’t.’ (*det* = ‘eat any fruit’)
- c. A: Har hun gått hjem?
has she gone home
 ‘Has she gone home?’
- d. B: Nei, {**det**_{CLAUSE}} tror jeg ikke.
no it_{NEUT} think I not
 ‘No, I don’t think so.’ (*det* = ‘that she has gone home’)

In exploring topichood as a potential trigger for OS in general, Anderssen & Bentzen make use of a proposal by Frascarelli & Hinterhölzl (2007) and argue that only certain kinds of topics undergo OS, while others do not. Frascarelli & Hinterhölzl distinguish between various types of topics, crucially between aboutness topics and familiar topics. *Familiar topics* are given or accessible constituents in the discourse. Moreover, they are typically destressed and often realized as pronouns. Hinterhölzl (2004) (cf. also Delfitto & Corver 1998) suggests that familiarity may be a trigger for scrambling proper in German. Likewise, Anderssen & Bentzen argue that pronominal objects with nominal antecedents undergoing OS in Norwegian have the characteristic properties of Frascarelli & Hinterhölzl’s familiar topics; they represent given information and refer back to a specific and identifiable (D-linked) referent in the discourse, and they are typically destressed. Hence, they propose that OS applies to pronominal objects that constitute familiar topics in Norwegian.

Turning to pronominal objects with non-nominal antecedents², although these objects have topical properties, as pointed out above, Anderssen & Bentzen propose that they are often *not* familiar topics. Rather, they frequently function as *aboutness topics*. The clausal or VP antecedents of such objects are arguably less accessible (see Andréasson 2009; 2010) or have a lower cognitive status in the discourse than nominal antecedents. According to Frascarelli & Hinterhölzl (2007) aboutness topics (or shifting topics) are “what the sentence is about” (cf. also Reinhart 1981) and represent a constituent that is “newly introduced” or “newly changed or returned to” (Frascarelli & Hinterhölzl 2007:88; from Givón 1983) and “is a matter of standing and current interest or concern” (Frascarelli & Hinterhölzl 2007:88, from Strawson 1963). Inspired by this, Anderssen & Bentzen argue that the function of pronominal object *det* ‘it/that’ with a non-nominal antecedent is to pick out a proposition in the previous discourse and turn this into what the conversation is now about, i.e. it has an *aboutness shift* function. They provide support for this proposal with data from spoken Norwegian from the Nordic Dialect Corpus (NDC) (Johannessen et al. 2009), as illustrated in (10) (from Anderssen & Bentzen 2012:14):³

(10) *Dialogue between a young man (kirkenes_01um) and a young woman (kirkenes_02uk) from Kirkenes in Northern Norway. Discourse topic: Musicals, and “Jesus Christ Superstar” in particular:*
kirkenes_01um: har du sett “Jesus Christ Superstar”?

‘Have you seen “Jesus Christ Superstar”?’

kirkenes_02uk: Ja. Har du?

‘Yes. Have you?’

kirkenes_01um: Var den bra?

‘Was it good?’

² Anderssen & Bentzen 2012 refer to pronouns with nominal antecedents as having *individuated* referents and pronouns with non-nominal antecedents as having *non-individuated* referents. In Bentzen et al. 2013a, however, they use the terms ‘nominal’ and ‘non-nominal’ antecedents, and we adopt that here.

³ Only the final, relevant response by speaker *kirkenes_02uk* is glossed word by word.

kirkenes_02uk: Nei, jeg synes ikke **det**.

no I think not it

‘No, I don’t think so.’ (*det* = that JCS was good)

In this dialogue, the musical “Jesus Christ Superstar” is the initial discourse topic. However, when speaker *kirkenes_01um* asks *kirkenes_02uk* whether she thought the musical was good, this represents an aboutness shift, making whether “Jesus Christ Superstar” was good or not the topic of conversation. *Kirkenes_02uk* responds by referring to the questioned proposition ‘was it good’ with pronominal object *det*, thereby picking up on and accepting it as the current/new aboutness topic in the conversation. Note that in order for a topic to be established in the discourse, it has to be picked up on and accepted by both interlocutors. Consequently, when *kirkenes_02uk* confirms that she has seen “Jesus Christ Superstar” in the dialogue in (10), she also asks her interlocutor, *kirkenes_01um*, whether he has seen it, but he ignores this and asks whether it was good. Clearly, at this point, *kirkenes_01um* could have picked up on this statement and started talking about his own experience with “Jesus Christ Superstar”. Instead, he follows up on the fact that *kirkenes_02uk* has seen it, and asks whether it was good. As can be seen from the example, in *kirkenes_02uk*’s answer, the pronominal object remains in situ.

However, in certain contexts object pronouns with non-nominal antecedents nevertheless tend to undergo OS. According to Anderssen & Bentzen (2011) this can be observed in several different environments. As illustrated in (5) in the introduction, one such context involves multiple mentions of *det* ‘it’ with a non-nominal antecedent, repeated as (11) below:

(11) John gikk til jobben. Maria forventet ikke **det**₁. (Norw.)

John walked to work.the Maria expected not it

Susanne forventet **det**₂ heller ikke.

Susanne expected it either not

‘John walked to work. Maria didn’t expect that. Susanne didn’t expect it either.’

Anderssen & Bentzen (2011) argue that the difference between *det*₁ and *det*₂ in (11) above is that while *det*₁ is an aboutness topic, *det*₂ is a continuing topic. Continuing topics are given and D-linked with a pre-established aboutness topic. In (11), the first instance of *det* establishes ‘John walking to work’ as what the discourse is about, while the second instance continues the discourse about this topic. According to Frascarelli & Hinterhölzl (2007), continuing topics behave syntactically and phonologically like familiar topics. Thus, it is not surprising that pronoun *det* in these contexts in fact does undergo OS, just like familiar topics do (for a discussion of similar issues related to the use of *it* and *that* in English, see Gundel et al. 2003).

Bentzen et al. (2013b) discuss another context in which *det* with a non-nominal antecedent has to undergo OS in Norwegian, namely when the antecedent of the anaphor is subject to pragmatic control. This means that the antecedent is not expressed linguistically but is rather to be found in the immediate extra-linguistic context as something that is the joint center of attention for the interlocutors in the conversation. Some relevant examples are provided in (12) (from Bentzen et al. 2013b:106):

(12) Watching John pretending to break our new expensive vase:

Slapp av, han gjør {det} ikke {*det}
relax off he does it not it
'Relax, he won't do it.'

This is arguably also a case in which *det* 'it' functions as a continuing topic, as it is picking up its reference from something that clearly is already established as the topic (albeit a non-linguistic one) of the discourse.

Anderssen & Bentzen find support for the claim that shifted *det* with non-nominal antecedents are continuing topics in the Nordic Dialect Corpus (NDC). In the dialogue in (13), the discourse topic is the problem of tourists hiking on foot in the ski tracks, ruining them. Thus, when speaker *karmøy03_gm* refers to this topic using pronoun *det* in the final utterance, this clearly is a continuing topic. And as expected, it occurs in the shifted position (from Bentzen & Anderssen 2012:12):⁴

(13) Discourse topic: The problem of tourists hiking on foot in the ski tracks:

karmøy03_gm: Men problemet var at når da alle fotturistene kom så fant jo ut de at det var finest å gå i **skisporene** for da slapp de å vasse.

'but the problem was that when all the hikers came, they realized that it was better **to walk in the ski tracks** because then they didn't have to wade in snow.'

karmøy04_gk: mm. Var akkurat **det** så skjedde nå i Bjørgene og sant # at # så alle for og trødde og så # ødela de.

'mm. **That** was exactly what happened now in Bjørgene and right # that # everybody stepped around and then # they ruined'

karmøy03_gm: mm. Ja # for der er jo ikke kultur her veit du for...

'mm. Yes # because there is no tradition here, you know, for...'

karmøy03_gm: så de skjønner **det ikke**.

so they get it not

'so they don't get it'

(*det* = that they cannot hike on foot in the ski tracks – discourse topic)

According to Anderssen & Bentzen (2012), then, pronominal objects that pick up on, and thus establish, newly introduced, non-nominal aboutness topics remain in situ or are placed clause-initially, while pronominal objects used in the continued the discourse about these topics, and thus function as continuing topics, occur in the shifted position and undergo OS.

In the current study, we want to expand on these information structure based approaches with reference to the notion *Common Ground* (Stalnacker 2002). Following Matic et al. (2014: 2) we take common ground to refer to "a set of possible worlds compatible with the propositions mutually accepted by the interlocutors", and explore a unified account of the choice of *es* versus *das* with non-nominal

⁴ As in the previous example from this corpus, only the final, relevant utterance by speaker *karmøy03_gm* is glossed word by word.

antecedents in German, and the presence versus the absence of OS in the same contexts in Norwegian. Considering the examples discussed above in light of the notion of common ground, it is apparent that in those cases where pronominal objects with clausal antecedents can undergo OS, whether it is as continuing topics or in contexts with pragmatic control, the propositions that these objects refer back to are mutually accepted as facts by the interlocutors. Thus, we argue, it is not enough for a proposition to be topical in order for it to undergo OS, it also needs to be established as part of the interlocutors' common ground.

We now turn to look at structures in German where the choice of *es* over *das* is determined by whether the proposition or fact referred to by this pronoun is acknowledged as a fact or as mutual knowledge by both interlocutors. We follow Anderssen & Bentzen's (2012) proposal that pronominal objects in general tend to be topical, but furthermore propose that they only shift when what the pronoun refers back to is knowledge shared by all interlocutors.

3. The current study

Scrambling in German and Dutch applies to DP objects or to PPs, moving such elements to a position preceding negation and adverbs. It is usually described as an optional operation. However, in certain cases, it may have an interpretational effect. In particular, Diesing & Jelinek (1995) argued that indefinite DPs are interpreted as existential in the unscrambled position, while when they scramble, they receive a specific or quantificational interpretation. This is illustrated for German in (14) (from Diesing & Jelinek 1995:28):

- (14) a. weil ich nicht **eine einzige Katze** gestreichelt habe. (German)
since I not a single cat petted have
 '... since I have not petted a single cat.' (no cats petted)
- b. weil ich **eine einzige Katze** nicht gestreichelt habe.
since I a single cat not petted have
 '... since there is a single cat that I have not petted.'

Pronominal objects in German (and Dutch) have received less attention in the literature on scrambling – perhaps because they simply scramble more or less obligatorily (cf. Thráinsson 2001; Richards 2006).

In the literature on propositional proforms in German, much focus has been devoted to the contrast between *es* as an anaphoric proform and the so-called *correlate es* (cf. e.g. Pütz 1986; Sudhoff 2003; and the contributions in Frey et al. 2016). The central observation is illustrated in (15a-b) from Schwabe et al. 2016:3):

- (15) a. Max bedauert es, dass Lea krank ist. (German)
Max regrets it that Lea ill is
 'Max regrets it that Lea is ill.'
- b. Max behauptet es, dass Lea krank ist.
Max claims it that Lea ill is
 'Max claims it that Lea is ill.'

These examples are contrasted with the examples in (16), in which the answers in (16a-b) contain all-new information. Importantly, *es* is not felicitous in (16b):

- (16) What's new? What happened?
 a. Max bedauert *es*, dass Lea krank ist.
 b. Max behauptet (**es*), dass Lea krank ist.

The traditional account for this (Pütz 1986; Sudhoff 2003; 2016) argues that there are two verb classes in German, the *bedauern*-class and the *behaupten*-class. While the former class may co-occur with either an anaphoric pronoun *es* or the placeholder/*correlate* *es*, the latter class only co-occurs with an anaphoric pronoun. In all-new answers, as in (16a-b), *es* does not refer to pre-mentioned established proposition in the contexts, i.e. it is not an anaphoric proform, but rather a placeholder/*correlate* *es*. Hence, as *behaupten* only takes an anaphoric *es*, the use of *es* is ungrammatical in (16b). As *bedauern* 'regret' is a factive predicate and *behaupten* 'claim' is an assertive predicate (cf. Hooper & Thompson 1973), there thus seems to be a restriction on the use of *es* that is related to factivity/presuppositioning. Non-anaphoric *es* is only available when what it refers back to is a fact, that is, when *es* is the complement of the factive predicate *bedauern*, but not when it is the complement of the assertive predicate *behaupten*.

In the current study, we take the approach to non-nominal *det* "it/that" proposed by Anderssen & Bentzen (2011; 2012) as our starting point, and explore whether this approach can shed light on the distribution of German *es/das* "it/that" with non-nominal reference. We also compare Norwegian placement of *det* and German use of *es/das* directly.

The approach by Anderssen & Bentzen identifies two crucial features that both facilitate OS of non-nominal *det* in Norwegian, viz. (i) the referent of *det* must be given and familiar to the participants in the discourse, and (ii) the referent of *det* must be an already established (continuing) topic in the discourse. Given these assumptions we developed a grammaticality judgment questionnaire for Norwegian and German consisting of dialogues between two speakers for the current study. The clause referent of the pronominal object was manipulated through context. In some dialogues, the proposition the pronominal object referred to was clearly given information to both participants and thus part of the common ground in the discourse. In these cases, the referent of the pronominal object was also typically (but not necessarily) a continued discourse topic. In other dialogues, the referent of the pronominal object constituted new information to one of the interlocutors. In those cases, the referent of the pronominal object was only established as common ground in the course of the dialogue. In all the dialogues, informants were given two options for the sentences containing the pronominal object; for Norwegian, we provided sentence both with and without OS of *det*, and for German, we provided sentences with *es* and with *das*. (17) illustrates one of our dialogues.

- | | |
|---|---|
| <p>(17) a. A: Har Vera fått sparken?
 <i>has Vera gotten fired</i>
 'Did Vera get fired?'
 B-1: Ja, visste du ikke det?
 <i>yes knew you not it</i>
 'Yes, didn't you know?'</p> | <p>b. A: Ist Vera entlassen worden?
 <i>has Vera fired gotten</i>
 'Did Vera get fired?'
 B-1: Ja, wusstest du das nicht?
 <i>yes knew you it not</i>
 'Yes, didn't you know?'</p> |
|---|---|

B-2: Ja, visste du **det** ikke?
yes knew you it not
 ‘Yes, didn’t you know?’

B-2: Ja, wusstest du **es** nicht?
yes knew you it not
 ‘Yes, didn’t you know?’

Informants were asked to judge the sentences based on their colloquial dialect, and instructed to assume the pronominal object to be unstressed. Sentences were marked as ‘ok’, ‘ok but the dispreferred option of the two’ or ‘impossible’. We got judgments from seven Norwegian speakers⁵ and 13 German speakers.⁶

4. Results and discussion: Parallels in the distribution of *es* and *das* in German and ±OS in Norwegian

Recall that in Norwegian, the pronoun used to refer to non-nominal antecedents is identical to the pronoun used to refer to neuter nominal antecedents, viz. *det* ‘it’. It is what *det* refers back to, that is, its antecedent, that determines whether it undergoes OS or remains in situ. The preferred option is for it not to shift, but in certain contexts, *det* with a non-nominal antecedent tends to undergo OS. In German, where pronominal objects scramble obligatorily, our investigation suggests that the most natural way of referring to a (non-nominal) clausal or VP antecedent is by using (unstressed) *das*, rather than *es*, as illustrated in the example below:⁷

- (18) A: Ist Vera entlassen worden? (German)
is Vera fired gotten
 ‘Did Vera get fired?’
- B: Ja, wusstest du ??es/das nicht?
yes knew you that not
 ‘Yes, didn’t you know that?’

In parallel, our Norwegian informants showed a preference for leaving *det* in situ in this context:

- (19) A: Har Vera fått sparken? (Norwegian)
has Vera gotten fired
 ‘Did Vera get fired?’
- B: Ja, visste du {?det} ikke {det}?
yes knew you it not it
 ‘Yes, didn’t you know?’

In the dialogues in (18) and (19), speaker A introduces the question of whether Vera has been fired as a (aboutness) topic, and speaker B picks up on this topic, and hence refers to the proposition with a

⁵ In addition, the two authors are also native speakers of Norwegian.

⁶ For both languages, our informant groups consist of both linguists and non-linguists.

⁷ We take a sentence to be ‘ok’ if more than half of our informants accepted it as ‘ok’ in the questionnaire (5 or more of the 9 Norwegian informants; 7 or more of the 13 German informants). Furthermore, we use the notation ‘?’ to indicate that an example is dispreferred by our informants as a group. This refers to cases where less than half of the informant group judged the example in question as ‘ok’, (3-4 of the 9 Norwegian informants; 5-6 of the 13 German informants). The notation ‘??’ indicates that an example was strongly dispreferred at the group level (‘ok’ from less than 3 of the 9 Norwegian informants; ‘ok’ from less than 5 of the 13 German informants). The notation ‘*’ is reserved for cases where more than half of the informants judged a sentence as ‘impossible.’

pronoun (*det/es/das*). However, as A's proposition is phrased as a question, Vera being fired is clearly not established as knowledge shared by both the interlocutors, and in B's question response, *das* and a lack of OS are consequently preferred by our informants. Only a few informants in either language also judged *es* or OS as ok. However, if A subsequently in the following turn takes Vera being fired to be a fact in accordance with B's response, the preferred option is for A to use *es* in German and OS in Norwegian, as illustrated in (20) and (21) following up from speaker B in (18) and (19), respectively:

(20) A: Sie hat **es/?das** wohl niemandem erzählt. (German)
she has it probably no one told
 'She has probably not told anyone.'

(21) A: Hun forteller {**det**} **vel** **ikke** {**??det**} til noen ennå. (Norwegian)
she tells it probably not it to anyone yet
 'She probably won't tell anyone yet.'

At the point in the discourse when A utters (20-21), Vera being fired is taken to be a fact by both interlocutors, and this proposition is part of the common ground.

Thus, as mentioned earlier, there appears to be an important difference between two interlocutors accepting a proposition as the topic of conversation and the same interlocutors accepting it as a fact. The former will invariably license the use of a pronoun to refer back to the relevant proposition. This is what is observed in B's responses in (18) and (19) above; even though Vera being fired has not been accepted as a fact by both speakers, B in her response accepts it as the topic of conversation. The difference between B's response and A's follow-up statement in (20) and (21) is that by the time of A's follow-up, it is clear that the proposition is taken to be a fact by both speakers.⁸ This means that a positive and a negative answer to a proposition should yield different preferences with regard to the use of *das/es* in German and the use of OS or no OS in Norwegian. This is indeed found to be the case, even though there is some variation among speakers with these examples, as we will see. (22)-(23) and (24)-(25) provide examples where speaker B confirms A's statement with an affirmative (yes):

(22) A: Vera ist entlassen worden. (German)
Vera is fired become
 'Vera has been fired.'

B: Ja, aber ihr Mann weiß **es/das** wohl noch nicht.
yes but her husband knows it/that probably yet not
 'Yes, but her husband probably doesn't know yet.'

(23) A: Vera ist entlassen worden. (German)
Vera is fired become
 'Vera has been fired.'

⁸ Note that this does not preclude the possibility that the relevant shared knowledge is false; the condition is only that it is shared (see Krifka & Musan 2012).

B: Ja, aber sie hat **es/das** gestern noch nicht gewusst, als wir uns getroffen haben
yes but she has it/that yesterday yet not known when we us met have
'Yes, but she still didn't know when we met yesterday.'

(24) A: Vera har fått sparken. (Norwegian)
Vera has got fired
'Vera has been fired.'

B: Ja, men mannen hennes vet **{det} nok ikke {?det}** ennå.
yes but husband.the her know it probably not it yet
'Yes, but her husband probably doesn't know yet.'

(25) A: Vera har fått sparken.
Vera has got fired
'Vera has been fired.'

B: Ja, men hun visste **{det} ikke {?det}** ennå igår da vi møttes.
yes but she knew it not it yet yesterday when we met
'Yes, but she still didn't know yesterday when we met.'

In the contexts above, where speaker B always confirms A's proposition, the German informants show a slight preference for *es* (although many of them also judge *das* as 'ok'), and the Norwegian informants prefer to use OS, even though the preference is not very strong in either language in examples (23) and (25). For German, there is a slightly stronger preference for *es* in (22) than in (23), while our Norwegian informants showed a stronger preference for OS in (24) than in (25). In all of these examples, it is clear that Vera being fired is not only accepted as the topic of conversation by both interlocutors, it is also taken to be mutually accepted as a fact.

A very different situation occurs if speaker B expresses surprise at A's proposition, thereby clearly indicating that A's proposition is *not* part of any common ground. In such situations, *das* is considered better in German and a lack of OS is preferred in Norwegian. Consider (26) and (27) as alternative dialogues to the ones in (22)-(25):

(26) A: Vera ist entlassen worden. (German)
Vera is fired become
'Vera has been fired.'

B: Aha? Sie hat **??es/das** nicht erwähnt als wir uns getroffen haben.
really she has it/that not mentioned when we us met have
'Really? She didn't mention that when we met.' (expressing surprise)

(27) A: Vera har fått sparken. (Norwegian)
Vera has got fired
'Vera has been fired.'

B: Åh? Hun nevnte {?det} ikke {det} for meg da vi møttes.
really she mentioned it not it for me when we met
 ‘Really? She didn’t mention that when we met.’ (expressing surprise)

In German, the preference for *das* in these contexts is very strong, while there is a bit more variation in the Norwegian judgements; a lack of OS is clearly the preferred option, but a few informants also accept OS. The difference between B’s responses in (22)-(25), on the one hand, and (26) and (27), on the other, appears to be related to the fact that in the latter, B clearly had not already accepted the proposition that Vera has been fired as a fact. In such cases, *das* is preferred over *es* in German, and OS is dispreferred in Norwegian.

A similar difference is observed between *it* and *that* in English. Gundel et al. (2003) discuss the role of prior beliefs in the choice between *it* and *that* when referring back to clausal referents, and show that using *it* to refer back to a proposition signals that it is already part of the interlocutors’ common ground, while the use of *that* suggests that the information is new and not part of the shared knowledge. Both alternatives are illustrated in (28) (from Gundel et al. 2003: 288). Gundel et al. also illustrate that while both *it* and *that* are compatible with an affirmative answer to a given proposition (B1-2), only *that* is acceptable when the answer is negative (B3-4). This is illustrated in (29), (from Gundel et al. 2003:289, adapted from Kamio & Thomas 1999).⁹

- (28) A: I just read that linguists earn less than psychologists.
 B: **That’s** terrible!
 B’: **It’s** terrible!
- (29) A: Janice fired her secretary yesterday.
 B1: Yes. Everyone in the office is aware of **that**.
 B2: Really? The people in the office weren’t aware of **that**.
 B3: Yes. The people in the office are aware of **it**.
 B4: *Really? The people in the office weren’t aware of **it**.

Further support for the view that surprise (and consequently a failure to acknowledge a proposition as mutually accepted) is provided in several of the contexts that our informants were asked to judge where speaker B expresses surprise and non-acceptance. Relevant examples are provided in (30)-(31) for German and Norwegian:

- (30) A: Ist Vera entlassen worden? (German)
is Vera fired become
 ‘Has Vera been fired?’
- B: Was? Ich wusste ***es/das** nicht!
what I knew it/that not
 ‘What? I didn’t know!’ (expressing surprise)

⁹ Our boldface in (29).

- (31) A: Har Vera fått sparken? (Norwegian)
has Vera got fired
 ‘Has Vera been fired?’
- B: Hva er det du sier? Jeg visste **{??det}** ikke **{det}**!
what is it you say I knew it not it
 ‘What? I didn’t know!’ (expressing surprise)

In both German and Norwegian, the informants overwhelmingly prefer the option compatible with a lack of common ground in these examples, that is, *das* in German and a lack of OS in Norwegian. A similar pattern is seen in (32)-(33), where *es* is very strongly dispreferred in German, and OS in fact is judged as ungrammatical in Norwegian. However, in German, *das* in a scrambled position is also strongly dispreferred in this context, while lack of OS in Norwegian is judged as perfectly fine. Notably, in both languages, the option of placing the proform in the clause-initial position is accepted by all informants. For German, this of course entails the use of *das*, as pronominal object *es* cannot occur in a clause-initial position.

- (32) A: Hat Hans sein Auto verkauft? (German)
has Hans his car sold
 ‘Has Hans sold his car?’
- B1: Nein, ich glaube ***es/??das** nicht.
no I think it/that not
 ‘No, I don’t think so.’
- B2: Nein, **das** glaube ich nicht.
no that think I not
 ‘No, I don’t think so.’
- (33) A: Har Hans solgt bilen sin? (Norwegian)
has Hans sold car.the his
 ‘Has Hans sold his car?’
- B1: Nei, jeg tror **{*det}** ikke **{det}**.
no I think it not it
 ‘No, I don’t think so.’
- B2: Nei, **det** tror jeg ikke.
no that think I not
 ‘No, I don’t think so.’

The results of the small survey reported here suggests that there is a correlation between contexts in which OS is dispreferred in Norwegian and those where *das* is the preferred option in German, and between structures in which OS is preferred in Norwegian and where *es* is used in German. The distribution between the various forms and positions appear to be influenced by the status of the pronoun’s antecedent in the discourse. When the proposition the pronoun refers to constitutes an

established fact, and is part of the interlocutors' common ground, Norwegian allows the pronoun to undergo OS, and German prefers realizing the pronoun as *es* rather than *das*. In contrast, if the proposition the pronoun refers to constitutes new information to any of the interlocutors, the proposition is clearly not yet part of their common ground. In such cases, the pronoun referring to this proposition is preferred in the unshifted position in Norwegian, while German prefers to realize the pronoun as *das* rather than *es*.

The new approach presented in this paper takes the proposal in Anderssen & Bentzen (2012) as its starting point. While we have expanded on that proposal, the current approach is still largely compatible with that of Anderssen & Bentzen (2012). Recall that in that paper, we argued that type of topicality determines whether the pronoun *det* with non-nominal antecedents shifts or not in Norwegian. More specifically, we suggested that when the referent of the pronominal object is the continuing topic of the conversation, this pronoun undergoes OS. For a proposition to constitute a continuing topic in the discourse, it has to be familiar to all interlocutors and established as part of the interlocutors' common ground.

A related aspect of our proposal concerns the link between factivity and OS/*es*. We assume that once a proposition is part of the common ground, it is taken to be a fact by the interlocutors. For example, in (22) and (24), when speaker A asserts that Vera has been fired, and B answers 'yes, but her husband probably doesn't know yet', B has, by her response accepted A's assertion as a fact, and continues to talk about issues related to this fact. Thus, OS applies in Norwegian, and the pronoun is realized as *es* in German. Note that in this context, the referent of the object pronoun is an aboutness topic and not a continuing topic. Given the analysis in Anderssen & Bentzen (2012), one would expect these elements to remain in situ. However, as speaker B confirms speaker A's assertion by responding 'yes', the proposition is immediately established as part of the interlocutors' common ground, and this appears to trigger OS and use of *es*. Thus, while Anderssen & Bentzen argue that type of topicality is the determining factor for OS, we here suggest that the most important condition for the use of OS and *es* with non-nominal antecedents is that the relevant proposition is part of common ground and established as a fact.¹⁰ In contrast, in (30)-(31), A asks a question ('Has Vera been fired?'), and B in her response does not confirm the propositional content of this question. Thus, the proposition that Vera has been fired is not yet established as part of their common ground, and consequently the pronoun referring to it is preferred in an unshifted position in Norwegian, and is realized as *das* in German.

Factivity is also argued to be an important factor for OS of *det* with non-nominal antecedents in Swedish (and Danish) in Andréasson (2008). In a written corpus of Swedish, she finds that pronominal objects with non-nominal referents occur in shifted position 91% of the time when these pronouns are complements of factive predicates. In contrast, they remain in unshifted position 72% of the time when they are complements of non-factive verbs. Finally, recall from section 3 that the availability of so-called placeholder-*es* in German has been argued to be restricted to (what we take to be) factive contexts, such as complements of verbs like *bedauern* 'regret' (Pütz 1986; Sudhoff 2003; 2016; Schwabe et al. 2016). Thus, the current proposal is independently supported by other studies of both Mainland Scandinavian OS and German proforms.

¹⁰ Note, however, that this proposal takes dialogues as its empirical base. In other types of spoken or written language productions, where turn-taking is less central, topicality may well play a more determining role.

5. Concluding remarks

This paper is a first attempt at developing a joint account of the distribution of OS in Norwegian and the use of *es/das* in German. In order to do this, we have carried out a cross-linguistic investigation, using grammaticality judgements. Our results reveal that there are clear parallels between the two languages; in contexts where Norwegian allows OS of pronominal objects with non-nominal antecedents, German prefers to use *es*, while when OS of these elements is dispreferred in Norwegian, *das* is preferred in German. Furthermore, it appears to be a requirement that the proposition that the pronoun refers to is part of common ground in order for OS and the use of *es* to be available. More research is needed to confirm these findings, opening up other interesting avenues of research. For example, it would be interesting to investigate the use of pronominal objects with non-nominal antecedents in different types of Norwegian and German corpora. Another natural extension of the current study would be to consider how these findings could be implemented in the syntactic structure of Norwegian and German. It would also be interesting to explore how these findings correspond to the use of *it* and *that* in English (see e.g. Gundel et al. 2003; Anderssen & Bentzen 2011) and related phenomena in other languages.

References

- Anderssen, Merete & Kristine Bentzen. 2011. Scandinavian Object Shift reanalyzed as TP-internal topicalization. Paper presented at the Comparative Germanic Syntax Workshop (CGSW) 26, Amsterdam, June 2011.
- Anderssen, Merete & Kristine Bentzen. 2012. Norwegian Object Shift as IP-internal Topicalization. *Nordlyd*: 39(1), *The Grammar of Objects*. 1–23.
- Andréasson, Maia. 2008. Not all objects are born alike — accessibility as a key to pronominal object shift in Swedish and Danish. In Miriam Butt & Tracy Halloway King (eds.), *Proceedings of the LFG08 Conference*, 26–45. Stanford: CSLI Publications.
- Andréasson, Maia. 2009. Pronominal object shift – not just a matter of shifting or not. *Working Papers in Scandinavian Syntax*: 84, 1–20.
- Andréasson, Maia. 2010. Object shift or object placement in general. In Miriam Butt & Tracy Halloway King (eds.), *Proceedings of the LFG10 Conference*, 26–42. Stanford: CSLI Publications.
- Bentzen, Kristine & Merete Anderssen. 2012. Norwegian Object Shift: The role of reference and topichood. Paper presented at the *Workshop on Scandinavian Object Shift*, University of Göteborg, March 2012.
- Bentzen, Kristine, Jason Merchant & Peter Svenonius. 2013b. Deep properties of surface pronouns: Pronominal predicate anaphors in Norwegian and German. *Journal of Comparative Germanic Linguistics*: 16(2-3), 97–125.
- Bentzen, Kristine, Merete Anderssen & Christian Waldmann. 2013a. Object Shift in spoken Mainland Scandinavian: A corpus study of Danish, Norwegian, and Swedish. *Nordic Journal of Linguistics*: 36(2), 115–151.

- Bentzen, Kristine. 2013. Object Shift. *Nordic Atlas of Linguistic Structures (NALS)*.
<http://www.tekstlab.uio.no/nals>.
- Corver, Norbert & Henk van Riemsdijk. 1994. *Studies on Scrambling*. Berlin/New York: Mouton de Gruyter.
- Delfitto, Denis & Norbert Corver. 1998. Feature primitives and the syntax of specificity. *Rivista di Linguistica*: 10(2), 281–334.
- Diesing, Molly & Eloise Jelinek. 1995. Distributing arguments. *Natural Language Semantics*: 3, 123–176.
- Diesing, Molly. 1992. *Indefinites*. Linguistic Inquiry Monographs. MIT Press. Cambridge, Massachusetts.
- Erteschik-Shir, Nomi. 2005. Sound Patterns of Syntax: Object Shift. *Theoretical Linguistics*: 31(1/2), 47–93.
- Fox, Danny & David Pesetsky. 2005. Cyclic linearization of syntactic structure. *Theoretical Linguistics*: 31(1/2), 1–45.
- Frascarelli, Mara & Roland Hinterhölzl. 2007. Types of topics in German and Italian. In Susanne Winkler and Kerstin Schwabe (eds.), *On Information Structure, Meaning and Form*, 87–116. Amsterdam: John Benjamins.
- Frey, Werner, André Meinunger & Kerstin Schwabe (eds.). (2016). *Inner-sentential Propositional Proforms: Syntactic properties and interpretative effects*. Amsterdam/Philadelphia: John Benjamins.
- Givón, Thomas. 1983. Topic continuity in discourse: An introduction. In Thomas Givón (ed.), *Topic Continuity in Discourse: A quantitative cross-language study*, 5–41. Amsterdam/Philadelphia: John Benjamins.
- Grewendorf, Günther & Wolfgang Sternefeld. 1990. *Scrambling and Barriers*. Amsterdam: John Benjamins.
- Gundel, Jeanette, Michael Hegarty & Kaja Borthen. 2003. Cognitive status, information structure, and pronominal reference to clausally introduced entities. *Journal of Logic, Language and Information*: 12, 281–299.
- Haider, Hubert & Inger Rosengren. 1998. Scrambling. *Sprache & Pragmatik* 49. Germanistisches Institut der Universität Lund.
- Haider, Hubert. 2006. Mittelfeld phenomena. In Martin Everaert & Henk van Riemsdijk (eds.), *The Blackwell Companion to Syntax*, Vol. 3, 204–274. Oxford: Blackwell Publishing.
- Hellan, Lars & Christer Platzack. 1995. Pronouns in Scandinavian languages: An overview. *Working Papers in Scandinavian Syntax*: 56, 47–69.
- Hinterhölzl, Roland. 2004. Scrambling, Optionality and Non-Lexical Triggers. In Anne Breitbarth and Henk van Riemsdijk (eds.), *Triggers*, 173–203. Berlin: Mouton de Gruyter.
- Hinterhölzl, Roland. 2012. Some notes on scrambling and object shift. In Johan Brandler, David Håkansson, Stefan Huber and Eva Klingvall (eds.), *Discourse and Grammar: A Festschrift in Honour of Valeria Molnar*, 305–321. Lund: Center for Languages and Literature, Lund University.
- Holmberg, Anders & Christer Platzack. 1995. *The Role of Inflection in Scandinavian Syntax*. Oxford: Oxford University Press.
- Holmberg, Anders. 1986. Word Order and Syntactic Features in the Scandinavian Languages and English. PhD dissertation, University of Stockholm.

- Holmberg, Anders. 1999. Remarks on Holmberg's Generalization. *Studia Linguistica* 53(1). 1–39.
- Hooper, Joan & Sandra Thompson. 1973. On the applicability of root transformations. *Linguistic Inquiry*: 4, 465–497.
- Johannessen, Janne Bondi, Joel Priestley, Kristin Hagen, Tor Anders Åfarli & Øystein Alexander Vangsnes. 2009. The Nordic Dialect Corpus - an Advanced Research Tool. In Kristiina Jokinen & Eckhard Bick (eds.), *Proceedings of the 17th Nordic Conference of Computational Linguistics NODALIDA 2009*. NEALT Proceedings Series Volume 4.
- Josefsson, Gunlög. 2003. Four myths of Object Shift ... and the Truth. In Lars-Olof Delsing, Cecilia Falk, Gunlög Josefsson and Halldór Sigurðsson (eds.), *Grammar in Focus, vol II. Festchrift for Christer Platzack, November 18, 2003*, 199–207. Department of Scandinavian Languages, Lund University.
- Josefsson, Gunlög. 2010. Object Shift and optionality: An intricate interplay between syntax, prosody and information structure. *Working Papers in Scandinavian Syntax*: 86, 1–24.
- Josefsson, Gunlög. 2011. Deconstructing Object Shift. Talk presented at *The VAMOS workshop: Objects – Information Structure, Prosody and Acquisition*, April 4–6 2011, University of Tromsø.
- Josefsson, Gunlög. 2012. Deconstructing (pronominal) Object Shift. Talk presented at the *Workshop on Scandinavian Object Shift*, March 2012, University of Gothenburg.
- Kamio, Akio & Margaret Thomas. 1999. Some referential properties of English *it* and *that*. In Akio Kamio & Ken-Ichi Takami (eds.), *Function and Structure*, Amsterdam: John Benjamins.
- Krifka, Manfred & Renate Musan. 2012. Information structure: Overview and linguistic issues. In Manfred Krifka & Renate Musan (eds.), *The Expression of Information Structure*. Berlin: De Gruyter Mouton.
- Lødrup, Helge. 2012. Some Norwegian 'type anaphora' are surface anaphora. *Journal of Germanic Linguistics*: 24(1), 23–52.
- Matić, Dejan, Rik van Gijn & Robert D. Van Valin, Jr. 2014. Information structure and reference tracking in complex sentences: an overview. In Rik van Gijn, Jeremy Hammond, Dejan Matic, Saskia van Putten & Ana Vilacy Galucio (eds.), *Information Structure and Reference Tracking in Complex Sentences*, 1–41. Amsterdam: John Benjamins.
- Mikkelsen, Line. 2011. On prosody and focus in Object Shift. *Syntax*: 14(3), 230–264.
- Pütz, Herbert. 1986. Über die Syntax der Pronominalform <es> im modernen Deutsch. Tübingen: Narr.
- Reinhart, Tanya. 1981. Pragmatics and linguistics: An analysis of sentence topics. *Philosophica*: 27, 53–94.
- Richards, Marc. 2006. Object shift, phases, and transitive expletive constructions in Germanic. *Linguistic Variation Yearbook*, vol. 6, 139–159. Amsterdam: John Benjamins
- Schwabe, Kerstin, Werner Frey & André Meinunger. 2016. Sentential proforms: An overview. In Werner Frey, André Meinunger & Kerstin Schwabe (eds.), *Inner-sentential Propositional Proforms: Syntactic properties and interpretative effects*, 1–21. Amsterdam/Philadelphia: John Benjamins.
- Stalnacker, Robert. 2002. Common ground. *Linguistics and Philosophy*: 25(5-6), 701–721.
- Strawson, Peter. 1963. Identifying reference and truth values. *Theoria*: 30, 96–118.
- Sudhoff, Stefan. 2003. Argumentsätze und *es*-Korrelate. *Zur syntaktischen Struktur von Nebensatzseinbettungen im Deutschen*. Berlin: WVB.

- Sudhoff, Stefan. 2016. Correlates of object clauses in German and Dutch. In Werner Frey, André Meinunger & Kerstin Schwabe (eds.), *Inner-sentential Propositional Proforms: Syntactic properties and interpretative effects*, 23–48. Amsterdam/Philadelphia: John Benjamins.
- Thráinsson, Höskuldur. 2001. Object Shift and scrambling. In Mark Baltin & Chris Collins (eds.), *The Handbook of Contemporary Syntactic Theory*, 148–202. Oxford: Blackwell.
- Vikner, Sten. 1994. Scandinavian object shift and West Germanic scrambling. In Norbert Corver & Henk van Riemsdijk (eds.), *Studies on Scrambling*, 487–517. Berlin: Mouton de Gruyter.
- Vikner, Sten. 2006. Object Shift. In Martin Everaert & Henk van Riemsdijk (eds.), *The Blackwell Companion to Syntax, Vol III*, 392–436. Oxford: Blackwell.